

CLAIMS

What is claimed is:

1. A method of implementing a optical data transmission of a mobile
5 station, in which method the mobile station, which comprises means for transmitting
and/or receiving data in optical format, is arranged in a mobile station stand which stand
comprises at least one data transmission element which receives optical signals
transmitted by the mobile station and/or transmits to the mobile station optical signals
intended for the mobile station , wherein the optical signals transmitted by the mobile
10 station are transmitted in optical format through the data transmission element and on
to an area surrounding the stand wherein the optical signals coming from the
surrounding area and intended for the mobile station are transmitted in optical format
through the data transmission element on to an optical receiver of the mobile station.
2. A method as claimed in claim 1, wherein the optical signal comprises
15 infra-red light
3. A method as claimed in claim 1, wherein the optical signal comprises
visible light.
- 20 4. A method as claimed in claim 1, wherein the optical signal comprises
ultra-violet light.
5. A data transmission element which is arranged to receive optical signals
25 transmitted by an optical transmitter of a mobile station and to transmit optical signals
to an optical receiver of the mobile station, wherein the optical signals transmitted by
the optical transmitter of the mobile station and the optical signals intended for the
optical receiver of the mobile station are arranged to propagate in an optical format
through the data transmission element.

6. A data transmission element as claimed in claim 5, wherein the optical signal is arranged to propagate in the data transmission element mainly by refraction.

7. A data transmission element as claimed in claim 5, wherein the optical
5 signal is arranged to propagate in the data transmission element mainly by reflection.

8. A data transmission element as claimed in claim 7, wherein at least one reflector is arranged in the data transmission element.

10 9. A data transmission element as claimed in claim 5, wherein the data transmission element is an optical fiber.

11. A mobile station stand which comprises a space and attaching elements for attaching a mobile station detachably to the stand, and at least one data transmission
15 element which is arranged to receive optical signals transmitted by an optical transmitter of the mobile station arranged in the stand and to transmit optical signals to an optical receiver of the mobile station, wherein the optical signals transmitted by the mobile station are arranged to pass in an optical format through the data transmission element and still as an optical signal to a surrounding area of the stand wherein optical signals
20 received from the surrounding area of the stand to the data transmission element are arranged to pass in optical format through the data transmission element to the optical receiver of the mobile station.

12. A mobile station stand as claimed in claim 10, wherein the optical
25 signal is arranged to propagate in the data transmission element mainly by refraction.

13. A mobile station stand as claimed in claim 10, wherein the optical signal is arranged to propagate in the data transmission element mainly by reflection.

14. A mobile station stand as claimed in claim 12, wherein at least one
30 reflector is arranged in the data transmission element.

14. A mobile station stand as claimed in claim 10, wherein the data transmission element is an optical fiber.

5 15. A mobile station stand as claimed in claim 10, wherein the stand is a desk stand.

10 16. A mobile station stand as claimed in claim 10, wherein the stand is a car stand.

17. A mobile station stand as claimed in claim 10, wherein the stand is an installation stand.

15 18. A mobile station stand as claimed in claim 10, wherein the stand is a protective casing.

19. A mobile station stand as claimed in claim 10, wherein charging means for charging the battery of the mobile station are arranged in the stand.

20 20. A mobile station stand as claimed in claim 10, wherein the stand comprises two data transmission elements, one for optical signals going out from the mobile station and one for optical signals coming in to the mobile station